

WHAT IS CLAIMED IS:

1. A method for authenticating a user for access to a computer network via a network access server including a voice interface and a speech synthesizer, the method comprising the steps of:

5 receiving a user identification from a user seeking access to the computer network via the voice interface;

issuing a variable challenge query;

receiving a response to the challenge query; and

selectively logging the user onto the computer network based upon a

10 determination of whether the response to the challenge meets a matching standard with reference to a stored voice sample sequence, wherein the voice sample sequence corresponds to the user identification and the challenge query.

2. The method of claim 1 wherein the variable challenge query is selected
15 from a set of potential queries, the variable challenge query determined in a manner such that the user cannot predict, in advance of the issuing step, a proper response to the challenge query.

3. The method of claim 1 wherein the logging on procedure comprises
20 submitting a stored computer network user identification and password by the network access server to a network security server.

4. The method of claim 3 further comprising the step of receiving, in
response to the submitting step, a set of credentials for a logged on user.

25 5. The method of claim 4 further comprising the step of creating an application proxy having the set of credentials for the logged on user, the application proxy carrying out requests on behalf of the user seeking access to the computer network.

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6. The method of claim 3 further comprising the steps of receiving a notification of successful logging onto the computer network and thereafter executing an application in accordance with vocal commands received by the voice interface.

5 7. The method of claim 6 wherein the application comprises a personal interactive voice response application.

8. The method of claim 6 wherein the application comprises a distributed conference bridge.

10 9. The method of claim 6 wherein the application comprises an instant messaging application.

15 10. The method of claim 1 wherein a communications interface of the network access server supports both data calls and voice calls over a same physical input line.

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11. The method of claim 1 wherein the challenge query is a request to repeat a phrase transmitted by the voice interface.

20 12. The method of claim 11 wherein the phrase transmitted by the voice interface is generated by a text to speech synthesizer based upon alphanumeric values.

25 13. The method of claim 1 wherein the challenge query is a question for which a corresponding vocal response has been recorded in an authentication database entry keyed to an identified user and the question.

14. A system for authenticating a user for access to a computer network via a voice interface, the system comprising:

a user authentication database including for each registered user:

an identification, and

a set of vocal samples corresponding to the identification;

a network access server for receiving a user identification from a user seeking authentication via the voice interface, issuing a variable challenge query, comparing a received response to the challenge query to a stored voice sample sequence corresponding to the user identification and the challenge query, and issuing a logon request, including a user identification and password, on behalf of an authenticated user determined by the comparison of the received response to the stored voice sample sequence;

a logon server coupled to the networked access server and configured to receive the user identification and password from the network access server and in response providing a set of corresponding credentials for use by an application proxy.

15. The system of claim 14 wherein the variable challenge query is obtained from a set of potential queries wherein the variable challenge query is determined in a manner such that a user cannot predict, in advance of issuing the challenge query, a proper response to the challenge query.

16. The system of claim 14 wherein the system includes a communications interface that supports both data calls and voice calls.

17. The system of claim 14 further comprising a voice applications server supporting a set of voice applications.

18. The system of claim 14 wherein the voice applications include a personal interactive voice response application.

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via the voice interface;

issuing a variable challenge query;

receiving a response to the challenge query; and

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corresponds to the user identification and the challenge query.

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